

**NERRS Science Collaborative Progress Report for the Period September 2012 through February 2012**

**Project Title: Temporal Investigations of Marsh Ecosystems (TIME)**

**Project Coordinator: Kristen Goodrich**

**Project start date: September 2012**

**Report compiled by: Kristen Goodrich**

**Contributing team members and their role in the project: Jeff Crooks, Applied Science Investigator**

A. Progress overview: State the overall goal of your project, and briefly summarize in one or two paragraphs, what you planned to accomplish during this period and your progress on tasks for this reporting period. This overview will be made public for all reports, including confidential submissions.

The overall goals of the TIME (Temporal Investigations of Marsh Ecosystems) project are to gain an understanding of stakeholder needs in estuarine management through an issues assessment, create a typology of ecosystem services provided by Southern California tidal wetlands, conduct a historical ecology study of the Tijuana River Valley (leveraging external funding), create models to track shifting services over time, and develop tools to disseminate and visualize models and other project-related information. TIME will synthesize information from the past, present, and future to inform wetland recovery goals in southern California both regionally and at the place-based Tijuana River National Estuarine Research Reserve.

For this reporting period, we initiated this program and anticipated focusing on the following objectives: (1) internal (team) and external (intended user and larger community) communications, as well as branding, (2) establishment of subcontracts, (3) hiring of support staff, (4) work-planning exercises, including shifting current work to accommodate TIME-related efforts, and (5) development of a critical path (project planning), outlining key milestones to develop the issues assessment (led by the Center for Collaborative Policy - CCP).

B. Working with Intended Users:

- Describe the progress on tasks related to the integration of intended users into the project for this reporting period.
- What did you learn? Have there been any unanticipated challenges or opportunities?
- Who has been involved?
- Has interaction with intended users brought about any changes to your methods for integration of intended users, the intended users involved, or your project objectives?
- How do you anticipate working with intended users in the next six months?

Both Intended User Groups - the Wetlands Recovery Project (WRP) and Tijuana River Valley Recovery Team (TRVRT) - have been integrated into the project from the outset. This has been accomplished through direct one-on-one engagement, as well as

continuing updates to these established user groups. Dr. Jeff Crooks and Kristen Goodrich were invited by Greg Gauthier, who staffs the WRP, to attend a monthly WRP meeting and present the scope of TIME, describe the forthcoming efforts and the Intended User role, and solicit feedback. Dave Ceppos, Collaborative Lead, was invited to facilitate this meeting and “get to know” the group.

What was expected to be a basic presentation and Q&A developed into a dynamic discussion about the term ecosystems services and its implications in resource management. It indeed validated the need for the ecosystem services typology component of this project. What was heard has been directly, and regularly, considered throughout the efforts in this reporting period, steering the emphasis and tonality of the draft issues assessment questions.

The TIME project was also re-introduced to the TRVRT – focusing on collaboration principles, elements of the recently-initiated historical ecology study, and the Climate Understanding and Resilience in the River Valley (CURRV) project, which is a climate vulnerability assessment and adaptation strategy funded by NOAA’s Coastal and Ocean Climate Applications program. CURRV will directly inform the future component of TIME. Feedback from the TRVRT included an interest in defining the study area identified for the historical ecology component to include Mexican canyon communities, as well as a desire to leverage partnerships with Mexican counterparts to inform the historical ecology and transfer lessons learned to the City of Tijuana. This feedback was communicated to the San Francisco Estuary Institute (SFEI), and their scope of work and interview list (now including Mexican universities and CA State Parks Archeologist) was subsequently modified.

Work with Intended Users will greatly increase through the next six months as the issues assessment is delivered.

#### C. Progress on project objectives for this reporting period:

- Describe progress on tasks related to project objectives for this reporting period.
- What data did you collect?
- Has your progress in this period brought about any changes to your methods, the integration of intended users, the intended users involved or the project objectives?
- Have there been any unanticipated challenges, opportunities, or lessons learned?
- What are your plans for meeting project objectives for the next six months?

#### **Progress on objectives**

Referring to objectives listed in section A, Objectives 1-4 were completed with TRNERR in a lead role and with strong support on developing communications materials from NSC staff. Objective 5 was completed with CCP as the lead.

The steps below were completed in preparation for the assessment launch:

- Developed and refined assessment interview

- Reviewed existing project overview to determine needs for targeted companion pieces
- Identified initial list of interviewees
- Prepared draft and final announcement of assessment process using key themes
- Prepared draft and final follow-up CCP introduction and coordination letter
- Determined key dates among team members

### **Early-course corrections**

The State Coastal Conservancy (SCC) provided input on the draft issues assessment and refinement of the problem identified as the WRP “stuck place.” This continuous refinement of the draft issues assessment, although time-intensive, has contributed to a richer, more relevant product.

Data (qualitative stakeholder feedback) from the TRVRT meeting encouraged TRNERR staff to establish a meeting with a staff member of the San Diego Association of Governments who organized the “Crossborder Climate Change Strategies - Raising Awareness of Adaptation” conference to explore bi-national climate partnerships.

### **Lessons learned**

The amount of time it takes to “kick-off” a meaningful project is substantial (even with the head start we had in terms of our established relationships with the two Intended User Groups). Due to the conceptual nature of the project and the further development of our team (which includes some new partners), more time for start-up should have been anticipated. The nature of an NSC project is somewhat of a shift for TRNERR, despite participating in highly collaborative work, and time to strategically plan for and adjust program (Research, CTP) efforts was required. It is clear, however, that a thoughtful approach now will help ensure a more efficient and fruitful project in the long run.

It was determined during this project period through discussions with CCP that setting rules of engagement in advance of project deliverables would be key to our success. CCP will facilitate another full TIME team meeting before assessment launch to come to a collaborative understanding on various elements of working together:

- What are the best mechanisms for continued communication and updates amongst us?
- What will be the most effective ways to contribute feedback on project products/deliverables?
- Will everyone on the team review everything or will different team members address different products?
- How will we make decisions on this project? Will we do so as a team all the time? Will there be decisions that TRNERR makes alone? What role will each of you play and want to play in decision-making?
- What will be the best approach to keep on track with various deliverables and progress reporting amongst us?

- D. Benefit to NERRS and NOAA: List any project-related products, accomplishments, or discoveries that may be of interest to scientists or managers working on similar issues, your peers in the NERRS, or to NOAA. These may include, but are not limited to, workshops, trainings, or webinars; expert speakers; new publications; and new partnerships or key findings related to collaboration or applied science.

### **Workshops**

In December 2012, CTP co-organized and facilitated the *Beyond Bathtub: Modeling and Responding to Sea Level Rise and Shoreline Change* workshop in partnership with USC Sea Grant and CA Ocean Protection Council. The workshop served as a venue for bi-directional information transfer to occur between scientists and managers about management needs and state-of-the science regarding climate change modeling and application constraints. Presentations and workshop summary will be available shortly at: <http://www.usc.edu/org/seagrant/research/BB.html>. Findings will directly support the "future" component of TIME.

Elements of TIME were also presented by Dr. Crooks at a conservation and sustainability conference at El COLEF (El Colegio de la Frontera Norte) in Tijuana, Mexico (Gobernación Ambiental y Sustentabilidad en la Región Mediterránea de Baja California: Viabilidad de las Áreas Esenciales para la Conservación).

### **New partnerships**

Due to the collaborative nature of this project, a connection was made with UC Irvine's School of Social Ecology for information transfer. Initial meetings including discussions of NSC and its work with the NERRS and collaborative methodology proposed in TIME project. These conversations resulted in a grant writing opportunity with UC Irvine and the potential to fund flooding models for the Tijuana River Valley. Further collaboration with the School is anticipated. Our partnership with California Sea Grant has also expanded to include work on TIME.

### **The next 6 months**

TRNERR CTP, alongside CCP, will be delivering the issues assessment to a collaboratively identified list, including many members of the intended user groups. The issues assessment will be delivered through various mechanisms, including online surveys, one-on-one interviews, and focus groups.

Intended users will also be engaged as experts in the ecosystem services workshops, which will largely be led by the Applied Science lead and new TRNERR-based Post-Doctoral Research Associate. This workshop series is planned for late summer, and will help set the stage for the second year's work.

- E. Describe any activities, products, accomplishments, or obstacles not addressed in other sections of this report that you feel are important for the Science Collaborative to know.

NSC has supported information transfer between SF Bay NERR (Our Coast Our Future project) work and Elkhorn NERR that has been helpful in the direction setting of TIME.